A STUDY OF EFFECT OF CAPITAL INVESTMENT ON ECONOMIC GROWTH AND SUSTAINABILITY IN INDIA

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MEGHA NAGESH KATNESHWARKAR

Under the guidance of

DR. NANDKUMAR BODHGIRE
(M.A., NET, SET, M. Phil, Ph. D.)
Assistant Professor,
School of Social Sciences
Swami Ramanand Teerth Marathwada University,
Nanded (M.S.) - 431606

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I. Introduction–

Capital investment refers to the funds used by organizations and businesses to purchase long-term assets, such as machinery, equipment, or buildings, with the expectation of generating future cash flows and benefits. During the period from 2010-20, India promoted significant growth in capital investment, with several sectors contributing to this trend.

One of the primary drivers of capital investment during this period was the government's push to improve infrastructure in the country. The government invested heavily in the development of roads, highways, ports, airports, and other transportation infrastructure, water etc. which created significant opportunities for businesses in related industries. Private sector investment also played a crucial role in the development of infrastructure, with several large corporations investing in power generation, telecommunications, and real estate.

Another significant area of capital investment during this period was the manufacturing sector. The government's 'Make in India' initiative, launched in 2014, aimed to boost domestic manufacturing and attract foreign investment. The initiative led to the development of several large manufacturing hubs across the country, with significant investments in industries such as automotive, pharmaceuticals, textiles, and electronics.

The technology sector also witnessed significant growth in capital investment during this period, with the rise of e-commerce, digital payments, and other technology-driven businesses. Several Indian startups received significant funding from venture capitalists and other investors, leading to the growth of India's startup ecosystem.

However, the period from 2010-20 was not without its challenges, and the country witnessed several setbacks in terms of capital investment. The global economic slowdown in

2012-13 and the disruption caused by the COVID-19 pandemic in 2020 had a significant impact on investment flows in the country. Additionally, several sectors such as mining and metals, which were significant contributors to capital investment in the past, faced challenges due to regulatory issues, market fluctuations, and environmental concerns.

An Economic growth is sustainable development when it is achieved by catering the present needs without compromising the ability of future generations to meet their own need. This is an Environmental perspective. From Financial perspective, Sustainable growth is one with affecting financial leverage. This research aims at analyzing sustainable growth with various such perspectives.

Overall, the period from 2010-20 witnessed significant growth in capital investment in India from public and private enterprises, FDI, FIIs with several sectors contributing to this trend. While the country faced several challenges during this period, the government's push to improve infrastructure, boost manufacturing, and promote innovation has set the stage for continued growth in the future.

II. StatementoftheProblem–

Capital investment is crucial for economic growth and sustainability in India, as it drives innovation, creates job opportunities, and generates income. However, the relationship between capital investment, economic growth, and sustainability in India has not been thoroughly examined, particularly from a sectoral perspective. The existing literature provides conflicting evidence regarding the impact of capital investment on economic growth and sustainability in India, which makes it challenging to formulate appropriate policy decisions. Therefore, it is essential to conduct a sectoral analysis of the impact of capital investment on economic growth and sustainability in India, taking into account the differences between sectors in terms of

investment, growth, and sustainability outcomes. This study will provide a comprehensive understanding of the relationship between capital investment, economic growth, and sustainability in India and help policymakers formulate effective policies that promote sustainable economic growth across sectors.Considering the above discussed background, the topic proposed for study entitled as – "A Study of Effect of Capital Investment on Economic Growth and Sustainability in India".

III. Reviewof Literature–

India has been a rapidly growing economy over the past few decades, attracting significant capital investment from both domestic and foreign investors. According to the World Bank (2021), India ranked third globally in terms of inflows of foreign direct investment in 2020, with a total of $57 billion. This growth has led to a range of research studies exploring the impact of capital investment on economic growth in India.

Arora and Vamvakidis (2004) found that foreign direct investment has a positive impact on economic growth, especially in the manufacturing and service sectors.

Goyal and Dhawan (2017) argued that domestic investment also has a significant positive impact on economic growth in India. Despite the positive impact of capital investment on economic growth, concerns have been raised about the sustainability of such growth. India heavily relies on non-renewable resources that contribute to environmental degradation and other social problems. As a result, there have been efforts to promote sustainable investment in India, with organizations like the CII and WBCSD highlighting the importance of sustainable investment in areas such as renewable energy, water management, and social infrastructure (CII-WBCSD, 2019).

Gupta and Singh (2020) argued that sustainable investment can also have positive economic impacts, such as job creation and increased competitiveness, leading to a "green recovery" in the post-COVID-19 world.

Research has emphasized the importance of taking a holistic approach to development in India that balances economic, environmental, and social considerations. India has experienced a slowdown in investment over the past few years, impacting its economic growth. However, human capital, such as education and skill development, has been a key driver of the country's economic success (Debroy & Kumar, 2018).

Capital inflows, both foreign and domestic, have played a crucial role in driving economic growth in India. Research conducted by Ghosh (2021) and Singh and Sharma (2021) found a positive relationship between capital inflows and economic growth in India. Sustainable investment has become increasingly important in India to ensure long-term economic growth while balancing environmental and social considerations. Research conducted by Nair (2018) and Murtaza and Hameed (2020) found a positive relationship between sustainable development and foreign direct investment, and that sustainable investment in renewable energy can contribute to economic growth.

Overall, the literature suggests that a holistic approach to development is necessary in India, balancing economic, environmental, and social considerations to achieve long-term sustainable growth.

The study of the effect of capital investment on economic growth and sustainability in India draws on several theoretical perspectives. One such perspective is the Neoclassical Growth Theory, which emphasizes the role of capital accumulation in economic growth. The theory was pioneered by economists like Robert Solow, who showed that in the long run, sustained economic growth is possible only through the accumulation of capital. The theory suggests that investment in physical and human capital, as well as technological advancements, can lead to increased productivity and growth.

Another theoretical perspective that is relevant to this study is the Endogenous Growth Theory, which emphasizes the importance of knowledge and innovation in economic growth. This theory was introduced by Paul Romer, who argued that technological progress is a result of deliberate investments in research and development. According to this theory, investments in human capital, such as education and training, can lead to technological advancements, which in turn drive economic growth.

In addition to these perspectives, the study also draws on the concept of sustainability, which is increasingly recognized as an essential component of economic development. The Brundtland Commission, which was established by the United Nations in 1983, defined sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainability encompasses economic, environmental, and social factors, and it recognizes that development must be pursued in a way that is not only economically viable but also socially and environmentally responsible.

Thus, the theoretical framework for this study draws on neoclassical growth theory, endogenous growth theory, and the concept of sustainability. By examining the relationship between capital investment, economic growth, and sustainability in India, this study aims to contribute to our understanding of how economic development can be pursued in a way that is both economically and socially and environmentally sustainable.

IV. Relevance of the Study –

The relevance of the topic lies in the significant role that capital investment plays in the economic development of India, as well as the increasing concerns over sustainability. India has experienced substantial growth in the past few decades, attracting both domestic and foreign capital investment. However, the sustainability of this growth is a pressing concern, given the heavy reliance on non-renewable resources that contribute to environmental degradation and social problems.

Understanding the impact of capital investment on economic growth and sustainability is crucial for policymakers and investors to make informed decisions that promote long-term sustainable growth. A sectoral perspective is particularly relevant, as different sectors may have varying impacts on economic growth and sustainability. The study of the effect of capital investment on different sectors in India can provide valuable insights for policymakers and investors in identifying the most effective and sustainable areas for investment.

Moreover, the study of the effect of capital investment on economic growth and sustainability can also contribute to the broader academic literature on the relationship between capital investment and economic development. India presents a unique case study due to its size, diversity, and growth trajectory, making it an interesting subject for academic research. Overall, this research is relevant for policymakers, investors, and academics interested in the economic development and sustainability of India.

V. ResearchGap–

Based on the literature review, some of the research gaps that can be identified for the topic are:

- Limited research on the impact of capital investment on sustainability: While there is significant research on the impact of capital investment on economic growth in India, there is limited research on the impact of such investment on sustainability. Future research can explore the relationship between capital investment and sustainability, particularly in the context of India's heavy reliance on non-renewable resources and debt funds.
- Lack of sector-specific analysis: Existing research on the impact of capital investment on economic growth in India has mostly focused on the overall economy, with limited sector-specific analysis. Future research can explore the impact of capital investment on different sectors of the Indian economy and

identify the sectors that are most likely to benefit from such investment.

- Insufficient research on the role of sustainable investment in economic growth: While there has been some research on the importance of sustainable investment in India, there is a need for further exploration of the role of sustainable investment in economic growth. Future research can examine the impact of sustainable investment on different sectors of the Indian economy and identify the potential for sustainable investment to contribute to long-term economic growth.
- Limited research on the impact of capital inflows on sustainability: Although capital inflows, both foreign and domestic, have been shown to have a positive impact on economic growth in India, there is limited research on the impact of such inflows on sustainability. Future research can explore the relationship between capital inflows and sustainability, particularly in the context of India's reliance on non-renewable resources.

Overall, these research gaps suggest the need for more comprehensive and sector-specific research on the impact of capital investment and inflows on economic growth and sustainability in India.

VI. Objectives oftheStudy–

Onthebasisofimportanceandliteraturereviewsomeobjectiveshave formulatedfor thestudypurpose, whichare asfollows–

1. To analyze the trends and patterns of capital investment and economic growth in India over the past two decades.
2. To identify the main factors that drive capital investment in India,

including the role of foreign and domestic investment.

3. To explore the challenges and opportunities for promoting sustainable investment in India, including the role of renewable energy, water management, and social infrastructure.

4. To assess the economic, environmental, and social impacts of sustainable investment in India, including job creation, competitiveness, and environmental and financial sustainability.

5. To develop an indicator related to capital investment in terms economic growth and sustainability in India.

6. To provide suggestions for policymakers, investors, and business leaders to promote sustainable investment in India and achieve long-term economic growth while balancing environmental, financial and social considerations.

I. HypothesisoftheStudy –

1. There is a positive relationship between capital investment (both domestic and foreign) and economic growth in India.

2. The impact of capital investment on economic growth varies across different sectors in India, with manufacturing and service sectors having a more significant impact.

3. Sustainable investment in renewable energy, water management, and social infrastructure positively contributes to economic growth in India.

4. Sustainable investment has a positive impact on job creation and competitiveness in India.

VII. ResearchMethodology–

The research methodology for this study will be a quantitative approach that involves statistical methods of analyzing secondary data from various sources. The study will focus on a sectoral perspective to provide a detailed analysis of the impact of capital investment on economic growth and sustainability in India. The following sections describe the research design, tools of data collection, sources of data, tools of analysis, significance, scope, and limitations of the study.

The research design for this study will be a cross-sectional design that will provide a snapshot of the current situation. The study will analyze data from various sectors in India to identify the impact of capital investment on economic growth and sustainability.

VIII. Sources ofDataCollection –

The emphasis of this study will be secondary data collected from various sources such as government reports, academic journals, and industry publications. The study will also use data from the World Bank and other international organizations to provide a global perspective on capital investment. Following variables have been proposed for study:

Capital Investment Related Variables

- Production of Machinery and Equipment

- Infrastructure: Roads, railways, Water sanitation, power
- Education:
- Agricultural Research and other capital Expenditure
- Access to Financial Services

Economic Growth-Related Variables

- Employment rate
- GDP (Gross Domestic Product) growth rate
- Employment rate
- Inflation rate

Sustainability Related Variables

- Human development indicators: This includes measures such as literacy rates, life expectancy, and access to healthcare, which are important indicators of economic development and growth Happiness Index
- Environmental sustainability indicators
- Social sustainability indicators

Sources of Data: Probable sources of data are enlisted here.

- World Bank: The World Bank provides data on various economic indicators such as GDP, environmental factors , etc.

- Reserve Bank of India: The Reserve Bank of India provides data on various economic indicators such as interest rates, money supply, and foreign exchange reserves.
- Ministry of Environment, Forests and Climate Change: The Ministry of Environment, Forests and Climate Change provides data on various environmental indicators.
- National Sample Survey Office: The National Sample Survey Office provides data on various social and economic indicators such as employment, wages, and consumption patterns.
- Census of India: The Census of India provides data on population demographics, education, and employment.
- Ministry of Commerce and Industry: The Ministry of Commerce and Industry provides data on various trade and investment indicators such as exports, imports, and foreign investment.
- National Institution for Transforming India (NITI Aayog): NITI Aayog provides data on various socio-economic indicators, including health, education, and infrastructure.
- Central Pollution Control Board: The Central Pollution Control Board provides data on air, water, and soil pollution levels in different parts of India.
- Energy Statistics: Energy Statistics provides data on energy

production, consumption, and distribution in India.

- National Accounts Statistics: National Accounts Statistics provides data on the overall economic performance of India, including Gross Value Added (GVA) by different sectors.

IX. Analysis of Data –

The various statistical tools from both descriptive and inferential statistics will be applied using software packages like StatistiXL, SPSS etc. It will include percentage, Mean and Standard Deviation, Correlation & Regression, ANOVA etc.

X. The Scope of the study–

The scope of this study is limited to analyzing the effect of capital investment on economic growth and sustainability in India from a sectoral perspective. The study will focus on the post-reform period in India.

XI. Limitations of the study–

The limitations of this study are the reliance on secondary data sources, which may have limitations in terms of the availability of data and the quality of data. The study will also be limited to the post-reform period in India, which may not provide a complete picture of the effect of capital investment on economic growth and sustainability in India during 2010-20

XII. Tentative chapter scheme of the study report

Chapter I Introduction: This chapter includes introduction, background

of the study, statement of theproblem, objectives, hypotheses, significance, scope, and limitations etc.

Chapter II Literature Review: This chapter will review the relevant literature on the theoretical framework of the study, which includes publications in domestic and foreign

Chapter III Methodology: The methodology chapter of this thesis will provide a detailed account of the research design and approach employed in the study. The chapter will cover the data collection methods and sources used to gather information related to capital investment and economic growth in India. The variables and measurements used in the study will also be discussed, along with the statistical analysis techniques applied to analyze the data.

Chapter IV Results and Discussion: It will present the findings of the research. This chapter will include a descriptive analysis of capital investment and economic growth in India. It will also present the statistical analysis of the relationship between capital investment and economic growth in different sectors. The chapter will conclude with a discussion of the findings and their implications. There will be sections and subsections in the chapter for clear understanding.

Chapter V Conclusion and Recommendations: This chapter will summarize the study's main points, conclusions, and policy recommendations for promoting sustainable capital investment in India. It will also suggest future research directions and areas for further exploration.

References & Appendices: The reference section will comprise a list of sources cited in the thesis. Additionally, the Appendices section will contain supplementary

materials such as charts, tables, and figures that provide additional information related to the research conducted.

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ResearchStudent

Megha Nagesh Katneshwarkar

ResearchGuide:

Dr. Nandkumar Bodhgire

Assistant Professor,
Dept. of Applied Economics,
School of Social Sciences,
SRTM University, Nanded.